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Do Maltreated Children who Remain at Home Function Better than Those who Are Placed?

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Abstract

The majority of children in the child welfare system remain with their maltreating parents, yet little is known about their level of functioning and whether they are in need of mental health intervention. The purpose of this study was to evaluate the mental health functioning of an ethnically diverse sample of 302 maltreated children and 151 non maltreated children ages 9–12 to see if there were differences between those who remained at home, those placed in kin care, non-relative foster care or a comparison group of children who were not maltreated. Children were evaluated on multiple measures of mental health functioning, both self report and caregiver report. Results showed that the maltreated children did not differ by placement type but did score significantly higher than the comparison children on many measures. There were substantial numbers of maltreated children scoring in the clinical range of measures in all placement types with over 60% of those remaining with birth parents being seen as functioning at a level that indicated a need for mental health intervention. While fewer comparison children had scores indicating a need for mental health care, the numbers were higher than noted in national studies. Implications of the findings are presented.

Keywords

Child Maltreatment; Child Welfare; Foster Care Placements; Kin Care

1. Introduction

Decisions on placement of children who have been determined by child welfare authorities to be abused and/or neglected are governed by current federal and state laws and local

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policies. Concern about children languishing in foster care helped lead to the passage of the Adoption and Safe Families Act of 1997 that spelled out time lines for decisions to help ensure maltreated children a permanent home (Allen & Bissell, 2004). It was in this act that the importance of relatives as permanent placements for children was codified. Since the passage of the act, state and local policies have been developed that have decreased both the number of children in out of home care in general, and in non-relative foster care in particular. Data from 2007 indicates that of 753,357 confirmed victims of maltreatment, only 20.7% of them were removed to out of home care (U.S. Department of Health and Human Services, 2009). Of the children in foster care in 2006 (the latest statistics available at the time of writing), 24% of them were living in relative care (U.S. Department of Health and Human Services, 2008). In Los Angeles County, the site of the current study and one of the largest child welfare departments in the country, the data shows that in 2007, of the 19,182 children in out-of-home placement, 10,184 (53%) were in relative placements. In that same year, 10,656 of the children receiving services from the department were receiving them in their own home (Department of Children and Family Services, County of Los Angeles, 2008). Clearly the majority of children who are maltreated are not placed in non-relative foster care but stay either with relatives or with their own parents.

Research has shown that the experience of abuse and/or neglect can have negative consequences for its victims and that children in the foster care system have high rates of mental health problems as will be discussed below. Given these factors, it is important to understand the functioning of maltreated children in all types of care so that their needs are appropriately addressed by the child welfare system. In this study we evaluated the mental health functioning of children who had been determined to be abused and/or neglected and a comparison sample of non maltreated children to see if the level of functioning varied by the child's maltreatment status or placement type (biological home, kin care or non relative foster care).

1.1 Child Abuse and Neglect, Foster Care, and Mental Health Functioning

The negative outcomes of child abuse and/or neglect to children's functioning and development have been well documented over the past years as attested to by a number of recent reviews of the evidence (e.g., Chapman, Dube, & Anda, 2007; Kendall-Tackett, Williams, & Finkelhor, 1993; Knutson, 1995; Putnam, 2003; Senn, Carey, & Vanable, 2008; Trickett & McBride-Chang, 1995; Watts-English, Fortson, Gibler, Hooper, & DeBellis, 2006). These effects include elevated rates of depression, anxiety, and PTSD; lower self esteem, and more behavior problems, and relationship problems.

A considerable body of research has developed documenting the high rates of mental health problems for children in the foster care system. The rates of clinically significant problems range from 31% to 82% depending on the study and definition of need (Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Halfon Mendonca, Berkowitz, 1995; Garland, et al., 2001; Glisson, 1996; McMillan, et al., 2005; Turpin, Tarico, Low, Jemelka, & McClellan, 1993; Urquiza, Wirtz, Peterson, & Singer, 1994; Zima, Bussing, Yan, & Belin, 2000). Most of these studies have looked at children in non relative foster care or failed to differentiate between those in non relative and kin care.

While many studies have looked at the functioning of children in foster care, a smaller number have focused on a comparison of children in kin care vs. non relative foster care. Most of these have concluded that children in non relative foster care have more problems than those placed with kin. Berrick, Barth, and Needell (1994) found that children placed in non relative placement scored lower on measures of functioning than those in kin care. Using the same sample, Brooks and Barth (1998) found that after controlling for age, both drug exposed and non drug exposed children in non-relative foster care were significantly

more likely to show problem behaviors as measured by the Problem Behavior Index than children in kinship care. However the children in non relative foster care were also more likely to have experienced previous placements than those in kin foster care and behavior problems are often related to placement change (James, Landsverk, Slymen, & Leslie, et al., 2004). Confirming the higher rates of problems of children in non kinship foster care, Keller at al. (2001) found that 35.8% of children in non relative foster care scored above the clinical range on the Child Behavior Checklist (CBCL) while only 16.4 % of children in kin care were above the clinical level.

A study in Norway had similar results finding that children in non relative foster care scored significantly higher (more problematic) on the CBCL than children in kin care (Holtan, Rønning, Handegård, Sourander, 2005). Another study of foster parents seeking treatment for their children's behavior problems found that non-kin foster parents rated their children as having more externalizing problems on the CBCL and on the Eyberg Child Behavior Inventory than the kin foster parents. This study did not find differences on internalizing problems as measured by the CBCL (Timmer, Sedlar, & Urquiza, 2004). Burns et al. (2004), analyzed data from the National Survey of Child and Adolescent Well-Being (NSCAW) that sampled children and youth receiving child welfare services throughout the country. They found significant differences in the CBCL scores of children living in kin care vs. non relative foster care. Of the children in kinship care, 39.3% scored in the clinical range in contrast to the higher figure of 63.1% in non relative foster care. Rubin et al., (2008) also used NSCAW data to evaluate how placement in kinship care affected well-being over time. At entry into care, they found that children in non relative foster care were more likely to have behavior problems than those placed in kin homes. McMillen et al.(2005) in a study of older youth, did not find support that children in kin care had fewer psychiatric problems than those in non-relative foster care, although there was a trend in that direction. However, most of the older youth with psychiatric problems were living in congregate care rather than home care.

Very few studies have compared the mental health functioning of the largest number of children known to child welfare, those that remain with their biological parents after the substantiation of abuse and/or neglect, with those placed in foster care. Burns et al. (2004), in the previously cited study, was one of the few to do this. Of children who remained with their parents, 47% scored in the clinical range of the CBCL as compared to 63.1% of children in non relative foster care and 39.3% in kin care, indicating that those in non relative foster care were the most problematic. Farmer, et al. (2001) utilized data from the Great Smoky Mountains study to compare children (ages 9–13) receiving mental health services who had ever been in foster care, children who had contact with child welfare but had not been in care, and children in poverty with no known contact with child welfare. They used the Child and Adolescent Psychiatric Assessment (CAPA) and found that children who had been in contact with child welfare but not in foster care (36.9%) and those in foster care (37.5%) met the criteria for Serious Emotional Disturbance at higher rates than those living in poverty but not associated with child welfare (24.0%). The two child welfare groups were not different from each other. Another study of young children (under 6) receiving evaluation as they entered the child welfare system in San Diego County included mental health screening (no standardized assessment was used) as part of the evaluation. The researchers found very low rates of mental health problems in this group but there were no significant differences between children in non relative foster care, kin care, or with biological parents (Leslie et al., 2004).

In sum, these studies do not definitively establish whether children in a particular type of placement function better or worse than others. The evidence seems to indicate that neglected/abused children in non relative foster have more mental health problems than

those in kinship care. The very limited evidence on mental health problems for children who are maltreated but remain with biological parents is equivocal on level of functioning. Most of the studies rely on caretaker report to determine the level of functioning. Conclusions are difficult to make because of the limited evidence, the varying ages of the children studied, and the different measures used. The purpose of this study was to understand whether the mental health functioning of a group of young adolescents differed by maltreatment status and placement type. In addition, we looked at the role of gender and ethnicity in functioning.

2. Materials and Methods

2.1 Participants

The subjects for this study were part of a longitudinal study on the effects of maltreatment on young adolescents funded by the National Institute of Child Health and Human Development. Approval for the study was granted by the Institutional Review Board of the University of Southern California, the Los Angeles County Department of Children and Family Services (DCFS) and the Juvenile Court of Los Angeles County. Each month, DCFS developed lists of newly opened cases in 10 zip codes in Los Angeles County that met the recruitment criteria: the child (1) had a newly substantiated case of maltreatment, (2) was between 9 and 12 years old, and (3) was either African-American, Latino, or white. The zip code restriction was imposed to ensure that children had similar neighborhood experiences, and the zip codes were chosen based on census tract information regarding urban character and ethnic diversity and on DCFS statistics on rates of maltreatment of children of different ethnicities. The eligible families received a letter from DCFS informing them about the study with a return post card where they could indicate their willingness or unwillingness to participate. Unless a postcard had been received indicating an unwillingness to participate, aproximately 10 days after the letter was mailed, the child's caretaker was called and either thanked for volunteering if they had returned the card indicating their willingness, or invited again to participate. In all, 77% of the families sent the letter agreed to participate. A sample of 303 maltreated children was the initial sample of maltreated children for the study. One of the children was in adoptive placement and was dropped from further analysis resulting in a final sample of 302 children from 229 families.

Names of comparison children and caretakers were obtained from a service that provides names for direct marketing and were recruited from the same zip codes as the maltreated children. The comparison children were chosen from the same zip codes to ensure that maltreated and comparison children would have similar neighborhood experiences. As in the maltreatment group, initial contact was via letter with the return post card if they did not want to be contacted. Because of a relatively large number of incorrect or incomplete addresses, it is difficult to accurately estimate the participation rate, but somewhat over 50% of families contacted agreed to participate. A sample of 151 children from 117 families is the comparison group for this study. (See Table I for details of the sample).

2.2 Procedure

The children and caretakers came into the project office and took part in a lengthy assessment that included measures on mental health functioning. The interviewers were doctoral social work and psychology students who received extensive training in the protocol and were blind to maltreatment/comparison status of the children. Children and caretakers were reimbursed for their time. While instruments were available in both Spanish and English, all children preferred to be interviewed in English; 23% of the caregivers were interviewed in Spanish.

2.2.1 Measures—We chose measures for this study that have established reliability and validity, have been used with Latino and African-American children as well as white, and have been widely used to evaluate mental health functioning in children. In order to get a more accurate picture of children's functioning, we used both self-report and caretaker report measures.

2.2.1.1 Child Report

Children's Depression Inventory (Kovacs, 1985, 1992): Depression was assessed by the Children's Depression Inventory (CDI) a 27 item self report measure for school age children. The author reports good internal consistency in standardization samples with coefficient alphas from 0.70 to 0.86 (Kovacs, 1985). Test-retest reliability in standardization samples was variable with scores ranging from a high of 0.87 to .71 (Kovacs, 1992). The CDI has been found to have good ability to differentiate normal children from those diagnosed with depression (Hodges, 1990; Smith, Mitchell, McCauley, & Calderon, 1990). (Our sample α = .85). Scores can range from 0–54 with higher scores reflecting higher levels of depression. As suggested by Kovacs (1992) we used a cut-off score of 19 to indicate a clinical level of depression

Multidimensional Anxiety Scale for Children (MASC) (March, Parker, Sullivan, Stallings, & Conners, 1997): is a 39 item self report scale designed for 8- to 17-year olds. It has a total anxiety score and four subscales: physical symptoms, social anxiety, harm avoidance, and separation anxiety. It has been found to have good internal consistency (range for subscales is . 70–.89), good test-retest reliability, invariant factor structure across gender and age, and discriminant validity (March, et al, 1997). We used the Total Anxiety Score in this analysis (our sample α = .91). Items are scored from 0 to 3 with a range of 0–117. Higher scores represent higher levels of anxiety. Raw scores are converted to T scores with a cut off score of 66 for boys and 72 for girls indicating clinically significant levels of anxiety (March, et al., 1997).

Self Perception Profile for Adolescents (SPPA) (Harter, 1988): Self concept/self esteem was measured with the Self Perception Profile for Adolescents (Harter, 1988). This global measure of self concept is an upward adaptation of the earlier Self Perception Profile for Children (Harter, 1985) and includes multiple dimensions of self perception. Items are scored from 1 (low) to 4 (high) on each item. We chose the adolescent version of the measure because the youth were either in or approaching adolescence, and the adolescent version was needed in the subsequent waves of data collection. For this study we used the domains of Scholastic Competence (sample α =.61), Athletic competence (sample α =.71), Social Acceptance (sample α =.66), Behavioral Conduct (sample α =.64), Close Friendship (sample α =.72), and Global Self Worth (Our sample α =.68). Higher scores reflect higher levels of self perception. No clinical cut off scores were available for this measure.

Youth Self Report (YSR) (Achenbach, 1991): The Aggression and Delinquency subscales of the Youth Self Report (Achenbach, 1991) were used to evaluate those constructs. The YSR is a widely used child report measure that is a companion to the parent report Child Behavior Checklist (Achenbach, 1991) with much evidence of its reliability and validity in various populations (Achenbach, 1991; Achenbach and Rescorla, 2001). The reliability alphas in this sample were .79 for Aggressive Behavior, and .76 for Delinquent Behavior. Items are rated from 0 to 2 for a range of 0–42 on the Aggressive Behavior Scale and 0–24 on the Delinquent Behavior Scale. Higher scores reflect more problematic functioning. No clinical cut off measure was used for these subscales.

2.2.1.2 Parent Report

Child Behavior Checklist (CBCL) (Achenbach, 1991): This widely used caretaker-report measure yields scores for Internalizing and Externalizing Behaviors, as well as a Total Problem Score and nine problem syndrome score. For this study we used the Internalizing and Externalizing Scores. Achenbach, (1991) reports test-retest reliability at one-week was . 95 for non clinically referred children on the problem scores. Subscale average reliabilities ranged from .70 to .93. Validity is supported by numerous studies which have reported significant correlations between the CBCL and other problem measures (Achenbach, 1991). In our sample the reliability alphas were .91 for Internalizing, and .91 for Externalizing. Items are scores from 0 to 2 with raw scores (which could range from 0–62 on Internalizing and 0 –66 on Externalizing) translated to Tscores. A cut off score of 67 was used to indicate a clinical level of symptoms (Achenbach, 1991).

Columbia Impairment Scale. (Bird et al., 1993): The Columbia Impairment Scale (CIS) Parent version was used as a measure of functional impairment. It is a 13 item scale that was developed as part of the NIMH Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) study to be administered by a lay interviewer to the parent or child (Bird et al, 1993). The authors report good concurrent and test-retest reliability in standardization samples and evidence of validity. The correlation between the Children's Global Assessment Scale of the Diagnostic Interview Schedule for Children was −0.73 (the scales rate impairment in opposite directions) and correlation with specific indicators of dysfunction was also high (Bird et al, 1993). In this sample, the alpha reliability was .87. Items are scored from 0 to 4 for a possible range of 0–52 total score with higher scores representing more impairment. A cut off score of 15 was used to indicate a clinical level of symptoms (Bird et al., 1993).

The correlations of outcome variables can be found in Table 2.

2.2.1.3 Demographic and Maltreatment Data: We gathered demographic and placement information in an interview with the caretaker. With permission from the child and family, we obtained the children's records from DCFS that contained the material about maltreatment allegations and investigations. We used the maltreatment category used by DCFS at the time the child became eligible for the study because maltreatment type has been found to relate to placement decisions (Zuravin & DePanfilis, 1999.) These maltreatment types were *sexual abuse*, *physical abuse*, *emotional abuse*, *neglect* (*general* or s*evere*), *substantial risk*, *at risk sibling* (a sibling was confirmed to be maltreated) or *caretaker incapacity*. For this analysis we collapsed the categories into *sexual abuse* (if any allegation of sexual abuse was present), *neglect only*, *Other abuse* (physical and emotional) and *at risk* (substantial risk, at risk sibling or caretaker incapacity) as it captured the way in which DCFS categorizes cases and collapsed those categories where children are not alleged to be victims of maltreatment. When there were multiple types of maltreatment, we used all types of maltreatment in the classification.

2.3 Data Analytic Strategy

We first determined that placement type for maltreated children was not related to ethnicity (X^2=7.40, p=.286) gender (χ^2 =5.03, p=.081), or maltreatment category (X^2 =6.89, p=.331). Children in the comparison group were just slightly older than those in the maltreatment group. Dependent variables were analyzed separately by child report measures and caregiver report measures because of the historically poor agreement between parent and child reports of psychological symptoms (Muris, Meesters, & Spinder, 2003; Rey, Shrader, & Morris-Yates, 1992; Yeh & Weisz, 2001). We analyzed the outcome measures with multivariate analysis of covariance (MANCOVA) in the GLM procedure of SPSS to avoid the possibility

of Type 1 errors. Factors were Placement, Gender, and Race/Ethnicity with age as a covariate. We included Gender as it is often an important consideration in psychological functioning (Rutter, Caspi, & Moffit, 2003). Race/Ethnicity has also been found to relate to differences in psychological functioning (Ezpeleta, Keeler, Alaatin, Costello, & Angold, 2001; Yasui, & Dishion, 2007). For those instruments that had clinical cut off scores (CDI, MASC, CIS, and Internalizing and Externalizing subscales of the CBCL), we categorized the measures according to whether a child reached the clinical level of symptoms on that measure. We compared the groups by those meeting a clinical cut off on any measure (X^2), and the total number of measures in the clinical range (ANOVA), for child report and parent report measures. Gender and age were not used as covariates in the analysis of parent measures because age and gender are used to develop the clinical cut-offs for the CBCL. As an additional check, we calculated effect size for each of the comparisons.

3. Results

The results of the MANCOVA can be found in Table 3. The interaction of gender and placement and ethnicity and placement were not significant so were excluded from further analyses. For the child report measures, placement was a significant predictor on the Social Competence, Behavioral Competence, Friendship Competence subscales of the SPAA and the YSR Delinquent Behavior. There was a trend toward significance on the MASC. There were no differences by placement on the Scholastic Competence, Athletic Competence, Self Acceptance subscales of the SPAA or the YSR Aggressive Behavior. Placement was a significant predictor on all of the parent report measures.

In post hoc analysis children in the comparison group scored higher on Social Competence than maltreated children in biological homes. They were higher on Behavioral Competence than those in Biological or relative homes, and on Friendship Competence than those in foster homes or with biological parents. Comparison children were lower on YSR Delinquent Behavior than those in biological homes or relative placements. Post hoc analysis of the parent measures revealed that comparison children scored lower (fewer problems) than the maltreated in all placement types on each of the parent measures. There were no differences between the child welfare placement groups on any of the measures. Mean scores on measures can be found in Table 4.

Gender was a significant predictor in the MANOVA on the MASC, the Athletic subscale of the SPAA and the YSR Delinquent measures (See Table 3) and there was a trend for girls to be lower on the Social Competence subscale of the SPAA. Girls were higher on anxiety (F=2.63, p=. 006), lower on Athletic Competence (F=27.57, p=.000) and lower on YSR Delinquent (F=6.38, p=.012). On the Caretaker report measures, there were no differences by gender.

Ethnicity was significant on one of the child report measures, YSR Aggression (F=2.63, p=. 05) and on the parent report measures, CIS Global Impairment (F=5.43, p=.001). In post hoc analysis Latinos scored lower than African Americans on aggression. Latinos were lower than African Americans and Whites on the CIS, and Bi-racial youngsters were lower than African Americans.

The comparisons of children scoring in the clinical range on any measure was significant on both the child report ($\chi 2$= 9.64 p =.022) and caretaker report measures (χ^2 =29.51, p=.000) with comparison children less likely to have a score in the clinical range on both than the maltreated children. The evaluation of the number of symptoms in the clinical range was also significant both on self report (F=3.342, p=.019) and caretaker report (F=10.93, p=. 000). On self report, comparison children had fewer problems than maltreated children

remaining with biological parents and there was a trend for comparison children to have fewer problems than maltreated children placed in foster care and with relatives. On parent report, comparison children had fewer problems than all children regardless of their placement. Again, there were no differences in maltreated children by placement type. Details are in Table 4.

Effect sizes on all analyses clustered around 0.

4. Discussion

We found that gender, ethnicity and maltreatment type were not related to placement indicating that these factors did not seem to enter into the decisions of where or whether to place children. Placement was significantly related to child functioning on several dimensions: social competence, friendship competence, and delinquency by child report and internalizing, externalizing, and level of impairment by parent report. However, those differences favored comparison children in the direction of fewer problems and higher competence than different placement groups of maltreated children. In no instance did the maltreated children differ from each other by placement type. While there were differences in the view of problems by parent report and child report, they differentiated between comparison and maltreated children not on maltreated children by placement type. This occurred whether the analysis was done by measure scores or on those who scored at a clinical level on a measure. In no analysis did the maltreated children differ by placement type and the effect sizes confirmed this lack of difference.

On measures of depression, anxiety, behavior problems, level of impairment, and self esteem, children who remained with their biological parents were no different from those who were placed in non relative foster care or in kin care. Slightly over one quarter of the maltreated children had clinical levels of symptoms in at least one area on self report measures, while less than 16% of comparison children met clinical symptom levels. Well over half of the maltreated children had clinical levels of symptoms according to the caretakers' evaluation, while less than 30% of comparison families felt their children had problems at a clinical level. This indicates maltreated children whether with biological parents, in foster care, or in relative care, have problems which may need mental health intervention. From this data it appears that children's level of function or dysfunction does not seem to play a major role in placement decisions in this jurisdiction.

Maltreatment type did not relate to children's placement which is in contrast to other findings (Zuravin & DePanfilis, 1999). It should be noted that the maltreatment category given by DCFS at the time of entry into the study may not be representative of the child's actual maltreatment experience. The usual practice is for the child to have a single category that is often the one that is easiest to substantiate. We found in previous work that children tended to have several kinds of maltreatment and that the vast majority of those in the At Risk category had actually suffered some type of maltreatment. Details on the children's actual maltreatment experience can be found in earlier articles (Trickett, Mennen, Kim, and Sang, 2009; Mennen, Kim, Sang & Trickett, in press).

There were also a number of differences by gender with girls having higher levels of anxiety, lower levels of athletic competence, lower levels of delinquency, and a trend for lower levels of social competency on self report measures. On parent report measures, there was a trend for girls to have lower levels of externalizing symptoms. It is not surprising that we found girls higher on anxiety problems but lower in delinquency since numerous studies have found that girls tend to have more internalizing problems and fewer externalizing problems than boys (Rutter et al., 2005). The lower levels of athletic competence seems

consistent with a society in which there continues to be more emphasis on athletic prowess of boys over girls (Bowker, Gadbois, & Cornock, 2003).

The finding that Latino youngsters scored lower on aggression than African American youngsters was found in a previous study (McLaughlin, Hilt, & Nolen-Hoeksema, 2008). It is a relative rare finding because much of the previous research has lacked sufficient numbers of Latinos for comparison. Our finding that Latinos scored lower on caregiver's perceptions of their level of impairment is a new finding and may be unique to this sample. It deserves additional study.

This study adds to the limited data on the functioning of maltreated children who are in the child welfare system but remain with their parents. Our conclusion that these children are functioning at similar levels with children in non relative foster care or kin care is consistent with Farmer, et al., (2001) study's findings of similar rates of problems in the three groups but contrasts with Burn's et al. (2004) findings of higher rates of problems for children in non-relative foster care than in either kin care or with biological families. Noteworthy is that nearly 60% of these children living with biological parents are viewed by those parents as having clinically significant levels of problems which could indicate a need for mental health intervention. This rate of problem behavior is similar to or higher than what many studies have found on the rates of problems of children in foster care (McMillen, et. al, 2005, Burns, et al., 2004). It corroborates the many studies that have found child maltreatment has serious consequences for its victims (e. g. Chapman, et al., 2007; Kaplan, Pelcovitz & Labruna, 1999; Putnam, 2003; Springer, Sheridan, Kuo, & Carnes, 2007). It should be noted that these negative consequences occurred to children who were not placed and thus did not go through the trauma of being removed from their home. This finding of high rates of mental health problems in maltreated children remaining at home is a cause for concern because previous work has found that these children are less likely to receive mental health services than those children in the foster care system (Hurlburt, et al., 2004; Mennen & Trickett, 2007) meaning that their mental health problems are often left untreated.

The finding of no difference in the rates of problems between those in non-relative foster care and kin care contrasts with the preponderance of previous evidence that children in non-relative foster care had more serious problems than those in kin care (Burns, et al., 2004, Berrick, et al., 1994, Keller, et al., 2001). There are several possible explanations for the differences between our findings and past research. Because our children were evaluated shortly after their entry into the child welfare system, they had not undergone numerous placement changes that some children in the system experience. Other studies included children at different points in their child welfare tenure and thus troubled children who were originally in kin care might have moved into non-relative foster care if caregivers could not manage their behavior. As we continue our evaluation, we can begin to address the issue of how placement relates to mental health functioning over time. Another possible explanation relates to the changes in policy that have encouraged services in the home or when placement is necessary, placement with relatives as a first priority. Los Angeles County has higher rates of relative placement than the country as a whole. For example, in 2002, when our data collection began, 42% of children placed outside the home were with relatives (Department of Children and Family Services, County of Los Angeles, 2003), while nationally 24% were with placed with relatives (U.S. Department of Health and Human Services, 2006). This indicates that Los Angeles County has almost twice the percent of children in kin care as the national average. It may be that in this jurisdiction, child welfare workers feel more comfortable placing troubled children with family members and are able to help them access needed services. In an earlier study (Mennen & Trickett, 2007), we found that children in kin care had the highest rates of mental health services of the three

groups. It is also possible that our findings of no difference between problem levels of those in kin care and non relative foster care is related to new policies encouraging placement with kin when possible. Perhaps results in other jurisdictions would be similar to ours under newer policies.

Also of interest is that while the comparison children had lower levels of problems than the maltreated children, the caregiver report measures found nearly 30% scoring in the clinical range. This is higher than normative samples (Achenbach, 1991) and is of concern. This may relate to neighborhood issues. We sampled from urban areas with high rates of problems and large numbers of children reported for maltreatment. It may be that the problems in these neighborhoods have impacted some of these children negatively resulting in higher levels of mental health problems. Others have found neighborhood problems contribute to higher levels of mental health problems for its child residents (Xue, Leventhal, Brooks-Gunn, Earls, 2005).

4.1 Strengths and Limitations

Our study has a number of strengths. The first of these is the use of more than one source of information about the child's functioning—both caretaker and self report. Most previous studies have used only caretaker reports. Another is the substantial number of youngsters in the study who were in the child welfare system but remained at home. This is a population that has not had much attention, even though they represent the largest number of children who have substantiated cases of maltreatment. We were able to get a better picture of these children's functioning and their similarity to other children in the system who live in out of home care. An additional strength is an ethnically diverse sample that included a large number of Latinos. Latinos are the fastest growing population in the child welfare system (Casey Family Programs, 2009) but one that has had far less attention in previous work (Dettlaff, Earner, & Phillips, 2009). In addition, we have a comparison sample of children from the same neighborhoods that have not been maltreated.

The study has a number of limitations that restrict its generalizability. Our sample comes from a single geographic area which is not representative of the country as a whole, and, as we noted, has a larger number of children in kinship care than is true nation wide. Thus our results might be different from other jurisdictions that place fewer children with relatives. It studied a limited age group (ages 9–12) and so is representative only of the young adolescent group rather than children as a whole. It is possible that younger and/or older children could look different from this age group. There were a sizeable number of families in each group who chose not to participate which could affect the outcome and thus generalizability. In addition, we did not have measures of children's level of functioning before placement so we are unable to make assumptions about how placement itself influences functioning.

5. Conclusions

Our findings indicate that maltreated children who remain with their birth parents have mental health problems at the same rate as maltreated children who are placed. Thus, attention needs to be given to these problems and appropriate services accessed. When a child welfare agency develops service plans for these families, the children's mental health problems need to be a central part of the plan rather than having the parenting problems that caused system intervention the only focus of care. Appropriate mental health treatment for distressed children could be aided by routine mental health screening for all children who come into the child welfare system whether or not they go into care. The child welfare system should then ensure that these children get the needed care. Redefining mental health treatment as a core child welfare function is essential for several reasons. First, highly

stressed families, as those in the child welfare system, whose children need services are less likely to access care (Thompson et al., 2007). Thus if the child welfare system does not facilitate referral to appropriate mental health treatment, these families are not likely to get their children into treatment. In addition, these families may not have health insurance to cover their children's mental health care (Gyamfi, 2004). This coverage is automatic when a child enters the foster care system and child welfare needs to find ways to ensure that care can be received and reimbursed for all children in need of treatment. This will mean devising new ways to ensure payment, a difficult task with seriously declining state budgets. While difficult, it is essential, as giving children the appropriate mental health treatment will not only help the children function better, it may avoid having mental health problems further impact a highly stressed family and ultimately lead to new referrals and possible placement. Children in difficult neighborhoods may also need access to mental health services and ways to secure these services for children who may not be covered by health insurance must be guaranteed. Securing appropriate treatment as children may help guard against more serious and costly problems later in the child's life (Kessler, 2002).

Our study adds to the limited knowledge on maltreated children remaining with biological parents but there remains a great need for additional research on this group of children so we can understand the issues that they face and how they fare over time.

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Table 1

Sample Characteristics.

	Total Sample		***Maltreated***		***Comparison***	
Age in years**	**M=10.9 (SD=1.2)**		**M=10.8 (SD=1.1)**		**M=11.1 (SD=1.2)**	
	N	**%**	**N**	**%**	**N**	**%**
Gender *						
Male	240	53.1	151	50.0	89	59.3
Female	212	46.9	151	50.0	61	40.7
Ethnicity						
African-American	170	32.0	122	40.4	48	32.0
Latino	177	39.2	106	35.1	71	47.3
White	50	11.1	35	11.6	15	10.0
Bi-racial	55	12.2	39	12.9	16	10.7
Placement after report						
Biological Parent	164	36.2		54.3		
Kin Placement	74	16.3		21.2		
Foster Parent Placement	64	14.1		24.5		
Not Applicable (Comparison)	151	33.1		100		

* p<.10,

** p<.05

Percentages do not always = 100% because of rounding.

Table 2

Intercorrelations of Outcome Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CDI	1												
2. MASC Total	.27**	1											
3. SPPA Scholastic	−.37**	−.21**	1										
4. SPPA Social	−.30**	−.27**	.36**	1									
5. SPPA Athletic	−.20**	−.21**	.38**	.46**	1								
6. SPPA Behavioral	−.33**	−.08	.44**	.26**	.17**	1							
7. SPPA Friendship	−.35**	−.22**	.37**	.54**	.28**	.24**	1						
8. SPPA Self Acceptance	−.51**	−.19**	.44**	.47**	.28**	.43**	.38**	1					
9. YSSR Aggression	.40**	.17**	−.13**	−.08	.03	−.30**	−.07	−.14**	1				
10. YSSR Delinquent	.41**	.05	−.21**	−.49	.03	−.39**	−.14**	−.25**	.66**	1			
11. CBCL Internalizing	.16**	.13**	−.12**	−.14**	−.05	−.07	−.10*	−.12**	.12*	.12*	1		
12. CBCL Externalizing	.18**	.04**	−.13**	−.10*	.02	−.14**	−.12*	−.16**	.21**	.20**	.59**	1	
13. CIS	.17**	.02	−.11*	−.07	.02	−.12*	−.13*	−.15**	.21**	.22**	.53**	.72**	1

Table 3

MANCOVA Results.

	Placement		Gender		Ethnicity	
	F	***p***	***F***	***p***	***F***	***p***
CHILD REPORT						
CDI Total	2.03		0.55		0.48	
MASC Total	2.25	*	7.65	** *	0.52	
SPPA Scholastic	1.29		0.00		1.03	
SPPA Social	4.23	***	3.31	*	1.07	
SPPA Athletic	2.00		27.57	** *	1.65	
SPAA Behavioral	2.97	**	2.71		1.13	
SPPA Friendship	2.97	**	0.10		0.56	
SPPA Self Acceptance	2.77	**	1.12		2.28	*
YSR Aggressive	0.12	**	0.50		2.63	*
YSR Delinquent	3.29	**	6.38		0.59	
CARETAKER REPORT						
CBCL Internalizing	6.98	***	2.01		1.63	
CBCL Externalizing	14.66	***	1.76		1.42	
CIS Global Impairment	8.95	***	1.35		5.43	***

* p<.10.

** p<.05,

*** p<.01

Note: Covariate = Age

Table 4

Outcome Measures by Placement Type.

	Placement Type					
	Biological Homes	**Foster Homes**	**Relative Home**	**Comparison**	**Post Hoc Comparison**	
	Mean (Std. Error)	**Mean (Std. Error)**	**Mean (Std. Error)**	**Mean (Std. Error)**		
MEASURE						
Self Report						
CDI Total	10.90 (0.69)	10.14 (0.98)	12.06 (1.04)	9.18 (0..77)		
MASC Total *	51.84 (1.97)	49.09 (2.46)	45.94 (2.69)	46.24 (1.94)		
SPPA Scholastic Competence	12.94 (0.30)	13.02 (0.43)	12.74 (0.45)	13.63 (0.33)		
SPAA Social Competence **	13.34 (0.32)	13.02 (0.46)	13.24 (0..49)	14.47 (0.36)	Comp > Bio, Foster, Relative	
SPAA Athletic Competence	12.60 (0.31)	12.34 (0.44)	12.84 (0.47)	13.50 (0.35)		
SPAA Behavioral Competence **	13.89 (0.29)	14.14 (0.41)	13.60 (0.44)	14.93 (0.32)	Comp > Bio, Relative	
SPAA Friendship Competence **	14.22 (0.35)	13.85 (0.50)	14.68 (0.53)	15.45 (0.39)	Comp >Bio, Foster	
SPAA Self Acceptance *	14.99 (0.32)	14.58 (0.45)	14.78 (0.48)	15.94 (0.35)		
YSR Aggressive Behavior	10.32 (0..51)	10.27 (0.73)	9.96 (0.77)	19.96 (0.57)		
YSR Delinquent Behavior **	2.13 (0.25)	1.86 (0.35)	2.30 (0.37)	1.18 (0.27)	Comp < Bio, Relative	
Caretaker Report						
CBCL Internalizing ***	9.41 (0.60	7.80 (0.86)	9.22 (0.91)	5.56 (0.71)	Comp < Bio, Foster, Relative	
CBCL Externalizing ***	12.40 (0.82)	13.43 (1.18)	12.23 (1.25)	5.45 (0.98)	Comp < Bio, Relative, Foster	
CIS Global Impairment ***	14.27 (0.92)	14.28 (1.32)	12.81 (1.41)	7.73 (1.09)	Comp < Bio, Relative, Foster	
Clinical Scores	**% in Clinical Range**	**% in Clinical Range**	**% in Clinical Range**	**% in Clinical Range**	X^2	**p**
Self Report	31.1	25.7	29.7	15.9	9.64	**
Caretaker Report	59.5	62.5	52.4	29.6	29.51	***
Mean in Clinical Range					***Post hoc* Comparisons**	
Self Report **	0.36	0.32	0.31	0.17	Comp < Bio Trend Comp < Foster, Relative	
Caretaker Report ***	0.96	1.03	0.86	0.41	Comp < Bio, Foster, Relative	

Means adjusted for gender, ethnicity, age,

*p<.10,

** p<.05, *** p<.00